

14TH EDITION



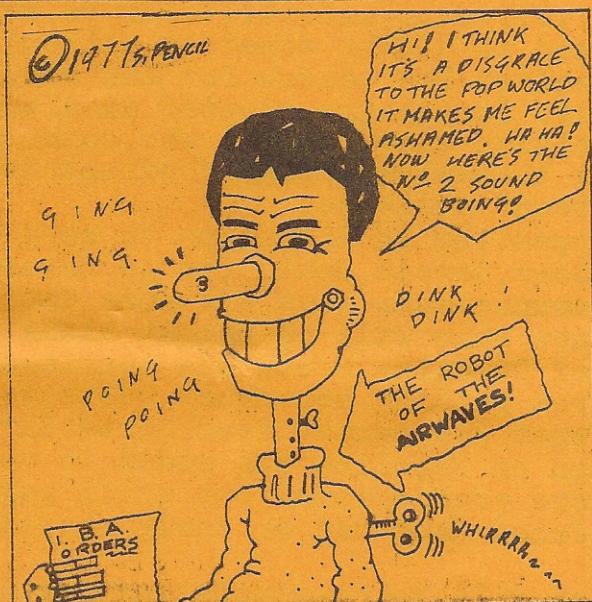
JULY 1977

'free radio focus'



POPULARITY POLL

R. VALENTINE STUDIO; "Don't tell me we've won again!" (See pp6-7)



Punk

on Caroline!
See Focus Feedback(p9)

'free radio focus'

No. 14, June/July '77. 15p+sae or 2IRCs;

13, The Chase, CRAWLEY, West Sussex, RH10-6HW, England; Editor: Mark Dezzani.

Times=GMT(BST/CET minus 1hr.) Freq's=kHz.

"FOCUS NEWSREEL"

Mebo II news. The 10kw 31metre band(mb) transmitter(tx) on board the Mebo II anchored in Tripoli harbour, Libya, has been reactivated and transmits on 9810, this channel though suffers alot of interference from Moscow! As suggested in FRF13 the 48mb transmissions have moved to 6210 resulting in improved reception. The medium wave frequency, 773, has been heard in the UK under Spain when conditions are favourable, the power though is only 40kw as the medium wave tx which has a supposed capacity of 105kw is still causing problems despite the overhaul whilst the ship was in Rotterdam harbour. The ship will soon move to Benghazi where it will relay Libya's domestic service whilst the transmitting station inland is modified. FRF have been informed that the short wave service will be called "R.Nova Int" although this is a long way off as the station's owners want all efforts concentrated on the Libyan medium wave relay. Atlantis mystery! Mark Jacobs on one of his Radio Mi-Amigo shows announced that he & Peter Chicago heard tests on 1562 after RMA closed, under the callsign "R.Atlantis." He said that it came from a Red Sands Fort. Several other people have reported hearing these tests, on 22/23 May at 00.10 a strong carrier was heard drifting about 100Hz & occasional tones were heard, there was also a hum on the signal. Another reporter in Bury St. Edmunds reported hearing announcements with the old R.Kaleidoscope address in London W1. A massive power of 140kw was also announced! The very strong signal received on all occasions rules out the possibility of it being a landbased pirate. There are several queries to be explained though regarding these tests; i) An announcement claimed the test originated from Roughs Tower (occupied by Roy Bates & family), but this fort has never been used by a station before, ii) The hum on the signal is similar to that on the 50kw tx aboard the Mi-Amigo, iii) No offshore station anticipating a regular service would use an address in the UK & iv) The announcer had a Dutch accent. All this points to a hoax by the people onboard the Mi-Amigo to make FR mags look idiots by yelling Atlantis has returned.....or is it?!

Caroline. On Monday 23/5, Caroline returned to a 24hr schedule although the night-time hetrodyne had not been solved. The reason for the return was that on the same day Radio Luxembourg adopted an album format from 20.30 onwards (British time). R.Lux' who committed the heinous crime of calling themselves "Big L" orientates their album format to the "teen" audience.



DJs on Caroline are now appealing to listeners to send in money to their address in Spain (A321 Rosas, Gerona, Spain), to go towards a new powerful transmitter. Recently announcements have got more ambitious with DJs announcing that maybe a new ship will be bought along with new studio equipment & even a revival of Caroline North was mentioned! Caroline is also getting finance now from selling souvenir books, T-shirts etc..., the same form of finance that R.Geronimo from Monte Carlo, used in 1970. The "3.1.9. Summer" campaign on Caroline has added to the sound of the station making it sound more professional but still personal. Dave Brown is a new DJ on Caroline. James Ross had an early shoreleave after a bout of sickness.

Capital R., the London commercial station will be commemorating the 10th anniversary of the MEBO Act on 14th August this year. Details are not yet known.

Focus Newsreel continued opposite...

R.E.S. Field mouse key ring-12p+sae; Anti bloodsport badges (with fox, hare, & stag) 10p+sae; Mini stickers for envelopes etc, 2 types, "Abolish blood-sports" or "Save a place for rural England, -5p for 20(+sae)." Ban otter hunt" stickers free; Blank po's;-Rural Eng' Soc', PO Box 123, Reading RG3 5JU.

Leicester's R.Gloria raided again. On Sun 12/6 RG DJ Alec Newman was followed by HomO men in a car while leaving his house for the days transmission. After loosing them he drove to the actual site & started transmissions with the rest of the RG crew. At 11.45 the station was raided by HomO boss man, Parry & five others bought in from another HomO division chosen as RG's lookouts wouldn't recognise them & also apparently chosen as they were fit, tough & heavy! Alec's car was searched by a young 'yobo' on a motorbike! The RG crew had seen the HomO coming though & hid the equipment. Returning after lunch to collect the gear they found it had gone & were subsequently told by a local farmer that the HomO men had spent several hours systematically searching every square metre of land until they found the RG gear. Despite the loss of the precision built tx & accompany equipment RG will continue. Meanwhile RG has moved back on channel from 1190 to 1187 after loosing their first 1187 crystal to the HomO in a previous raid.

Shortwave Landbased News;....The station reported in FRF13 as R.Europe Int' has now changed their name to ABC Germany as many people confused them with the old REI which was an FORP member station. Their tx power is 125w and studio equipment includes; 3 turntables(Braun, Lenco & Dual), 4 tape-recorders including two professional Revox machines, 2 mixers(a 6 channel Dynacord & 3 channel Telefunken) & 2 Sennheiser microphones..... R.Sunshine(GB) will be making tests on 9360, just outside the 31mb, in addition to the regular transmissions on 6235. Their tx power is 90w. other alternate 48mb freq's available to R.Sunshine are 6200, 6205, 6243, 6265 & 6288. They would like to know if one of these freq's would give better reception than 6235? R.Sunshine's address is;c/o Kent Place, Norwell, Newark, Notts, Eng..... Tower R. now uses the FORP/FRF address(13, The Chase, etc...) & will transmit on every 2nd Sunday of the month. Tx power is 120 watts although it's usually run at 60w output. They also want (like ABC G) advice on a regular freq' for that date(i.e. 2nd Sundays.) Transmission times will be 10-12.00 & a DX prog' is in the pipeline!...Scandanavian News...R.Snoopy Int' is heard clearly in Sweden, programmes are in Eng., German & Swedish. The music played is mainly soul. Their address is; PO Box 50, Oude Pekala, Holland. They hope to have QSL cards printed soon... Radio Colorado is a new station first heard on 24/4 on 6220 with a power of 50w. Their address;c/o FRL, PO Box 46, N-6650 Surnadal, Norway...Omega R. (first heard 16/1/77) has been on every Sunday recently with 50w on 6276. We've had two addresses given to us for this station; Fack 309, 790 -83 Alvdalen 3, Sweden & Hardtstrasse 62, D-4300 Essen 11, FRG(Reinhold Mardof's address!). Radio Playboy broadcasts in Swedish on 6225 & uses the FRL address. Still in Scandanavia, the DDXLK (Dansk DX-Lytter Klub) hobby pirate list no.2(of 1977) is now available for 2IRC's a copy from; PO Box 392, DK-8100 Aarhus C, Denmark. It's a very good publication including a listing of all SW pirates, photo's of studios, QSLs, a guide on how to write a reception report etc!.... The Sound Of Sweden(SOS) now have their own tx of 15w power. Until recently their broadcasts have been relayed by other landbased pirates in Sweden, West Germany & Holland. SOS also have a new address which is; 40, Robinson Rd., London SW17, Eng. DJs are Glenn Roberts, Jeff Anderson, Martin Swede & John Howenz. They say they'd be delighted to receive a programme from someone in Eng' featuring excerpts from ILR & landbased pirate stations(good quality only!) Why not have a go?!!.... Back to the rest of Europe now,&.... Skyport R., have abandoned tests in the 25 & 31mb due to lack of response & TV Interference caused by the high power & high frequency. Tests may be carried out near the 41 mb soon. Meanwhile they have been using 6260 recently instead of the usual 6250 channel..... R.Benelux which was reported in FRF13's logbook as having no address now uses the Free Radio Service(NL)address of; PO Box 41, 7700AA Dedemsvaart, Holland. Their programme includes several offshore jingles..... Focus Newsreel continued on p.10...

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FREE RADIO WAVES magazine; 15p+sae (or 2IRC's) from; Flagstones, West Heath Lane, Sevenoaks, Kent, Eng.: In no.5 out soon, includes poll results & comment on station & programme sections + all the usual landbased FR news!
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'LANDBASED LONDON' PART 2.

By 'Ed' of R.Celebration(London.)

In the spring of 1973 some of the Radio Jackie & Radio Jennifer staff decided to leave to join a new station to London (previously heard in Essex & East London on 186m) called Radio Kaleidoscope.

This station broadcast with higher power than most and had very professional programming on 266m from 12am-2pm at first but later from 10am-3pm. However, reception to stations already using that frequency was hampered, e.g. Thames, Tower & Marina, and not much more was heard from these stations again. Other stations operating around this time, Radios Free Atlantis, Electra, Atlantis & yet another Free Caroline were experiencing staff problems and had since ceased to exist.

Radio Invicta had again switched times, this time to Sunday evenings, and later extended this to cover Monday, Tuesday, Thursday & Friday evenings as well. Now due to staff problems Radio Jackie & Jennifer had problems and the Jackie VHF service had to be temporarily suspended, and a new station, Radio Classic took their Saturday evening spot on the LTIR (also the medium wave (mw) service closed two hours earlier at 4pm.)

Here's a typical programme schedule for a week in the summer of 1973:-

Medium wave.

Saturdays; Radio Star 11am-4pm. 227m.

Sundays; Radio Jackie 10am-4pm. 227m.; Radio Kaleidoscope 10am-3pm.

266m.; Radio Jennifer 3pm-5pm. 260m. (Irregular due to low staffing.)

CLASSIC

VHF.

Sun-Tues, Thurs & Fri' nights 10pm-11pm Radio Invicta on 92.4MHz.

Radio Star. Thurs nights 9 or 10-12, 94.4MHz.; Radio Aquarius. Fri' nights 10-1am, 94.4MHz.; R.Classic. Sat' nights 9-12, 94.4MHz.; R.Oddysey. Sun' nights 9-11, 94.4MHz. (All stations on 94.4MHz are LTIR stations.)

Later on Radio Oddysey left the LTIR never to be heard again, and Radio Classic moved to Sunday nights to make way for the return of Radio Jackie on Saturday nights from 9 till midnight. During the summer of 1973 Radio Star staff decided that they could no longer continue with their VHF service as well as mw, so this was terminated. Radio Kaleidoscope who had meanwhile become quite popular from their regular broadcasts were looking for room to expand, so they joined the LTIR with programming on Thursday evening from 10-12pm. taking Star's place.

During this period Radio Jennifer received a series of nasty raids from the post office & had to stop broadcasting regularly (occasional bank holiday broadcasts could still be heard). Meanwhile Radio Concord were heard from time to time on Sunday afternoons on 230m.

Later, the LTIR decided it still had room to increase its programming & they started advertising for a programme contractor to operate on Wednesday evenings, and rumours started circulating that Radio Invicta might join the network. However nothing came of this, or of Wednesday evening broadcasts from any station. In the Autumn of 1973 the LTIR operators announced that the network would shortly close, due to the advent of legal commercial radio in London, and in October the last LTIR programmes were heard from Kaleidoscope, Aquarius & Classic. Radio Jackie stated that they had their own VHF transmitting gear, and would continue, but nothing much ever came of this. Some weeks later Radio Star revealed that they had plans to close as well, and shortly before Christmas their medium wave service, indeed their station was heard for the last time.

Continued opposite.....

RADIO JACKIE



Landbased London continued....So this left the medium wave services of Jackie & Kaleidoscope & Radio Invicta who were soon to change to Bank Holiday only programming. Concord & City had since ceased broadcasting to any great extent. But despite all this Christmas '73 brought extremely good broadcasts from Radio Jackie using high power for 48 hours continuously on Christmas & Boxing Days, and Radio Tranquility using high power for three nights during Christmas week, very good programmes like phone-ins etc, presented by ex-offshore djs and also Kaleidoscope staff. Numerous other stations, too numerous to mention were heard as well as Kaleidoscope International on Christmas day.

Spring '74 came with the creation of a new station to broadcast alongside Jackie & Kaleidoscope, formed from various other stations like Radio Carol, London Weekend Radio and Skyport(SW). This was Swinging Radio England, (SRE) on 239m from 10am-2pm. This lasted some months, but then after a post office raid & staffing difficulties they had to close never to be heard again. Some weeks after SRE's closure, during the summer of '74, some old familiar names to North London listeners were heard again over the airwaves, this time going under the name of 'Radio Dynamite 235'. They were of course the old Concord staff.

Dynamite broadcast on Sundays 10am-4pm and used quite high power(500w at one point. Ed').

Also at this time another station opened up, trying out for the first time a high power night time medium wave service

called 'Wonderful Free Radio London' (WFRL)on 266m every Thursday & Sunday night from 11pm-1am, tests had been going on for some months. This station proved very popular especially in North London (WFRL's service area) and also well outside London due to extended coverage at night. Radio Dynamite

were impressed by this form of broadcasting(although they had tried it before without success) & decided to extend their service into the night with Dynamite NTS(Night time service), commencing at mid-night on Saturday through till 10am Sunday when Radio Dynamite would start up from a different location or sometimes the same. However, differing ideas among station staff caused a split in the station between Dynamite NTS & Radio Dynamite, with the result of NTS re-emerging as Radio Concord & Radio Dynamite eventually being forced to close down due to intense post office activity.

In Autumn '74 test transmissions began from a new station, London Music Radio(LMR) on 389m(these tests being in the evenings). LMR was run by people who previously operated City & Anonymous plus a few of the Jackie & Kaleidoscope staff & was closely linked with Radio Invicta, (now a Bank Holiday only operator).

Here's a typical programme guide for Summer '74.

Medium Wave; WFRL. Thurs & Suns, 11pm-1am. 266m.; R. Concord. Sat/Sun 10pm-10am.

225m.; Sundays: R. Jackie. 227m. 10am-4pm(later 2pm.); R. Kaleidoscope. 10am-3pm. 266m.; R. Dynamite. 10am-4pm. 235m.; Others=Linda Anne, Escort, Skyline, Atlantis, 227m.+Big Noise(270)&LMR(389.)

VHF. R. Invicta, Bank Hol's. 10am-6pm Or 8pm, 92.4MHz; Sat' LMR tests(different one, 94.4MHz.)... Next month... F. B. U. N. S. R. etc!!

DYNAMITE 235



6 FREE RADIO FOCUS/FREE RADIO WAVES POPULARITY POLL 1976/77 RESULTS

BEST STATION	Pts.	BEST QSL CARD	Pts.
1) ABC ENGLAND	26	1) TIME R.	25
2) R.Valentine	16.5	2) R.Ch.292	17
3) R.Jackie(London)	13	3) Condor R.	
4) London Music R.	5	4) R.Solent City	9
R.Invicta	5	5) Skyport R.	6
6) Britain R. Int'	4	6) R.Hawaii	4
European Music R.	4	R.Verona	4
R.Luckey Star	4	R.Sombrero	4
R.Telstar(Lndn.)	4	9) R.Ali Baba	3
10) R.Valleri	3.5	10) R.Luckey Star	2.5
11) R.Ch. 292	3	Fen R.	2
Kent North R.	3	R.Invicta	2
13) R.Gloria(FRG)	2	R.Titanic	2
R.Solent City	2	R.Zodiac Int'	2
Time R.	2	15) ABC England	1
Westside R.	2	BBMS	1
17) R.Free Midlands	1	R.Gnome	1
R.Gemini	1	R.Maniac	1
R.Sylvania	1	R.Saturnus	1
		Tom Cat R.	1

BEST PROGRAMMES	Pts.
1) ABC ENGLAND	15

R.JACKIE	Pts.
3) R.Valentine	10
4) R.Solent City	7
5) R.Invicta	6
6) European Music R.	5
R.Valleri	5
8) R.Concord	4
R.Telstar(Lndn.)	4
10) R.Ch.292	3
R.Gloria(FRG)	3
Kent North R.	3
London Music R.	3
R.Luckey Star	3
R.Maniac	3
Time R.	3
17) Britain R.Int'	2
R.Sunshine(GB)	2
R.Sylvania	2
20) ETICK R.	1
R.Free Midlands	1
R.Northsea Int'LB	1
R.Snoopy Int'	1

WORST STATION	Pts.
1) BLACK SHADOW	6
2) R.Verona	4
3) R.Casablanca	2
4) Ali Baba,	1
Andromeda, Caroline	
Int', RNI/Sovereign,	
Hawaii, Maniac, R.	
Wessex, R.Skyline,	
Sexy Sam(& other	
repeater QSOs!)	
13)*R.Europe Int'	0.5
R.Atlantis	

(*=The old REI!)

Comment. Some of the higher rated QSL cards are shown opposite, a large copy of the Time R. QSL can be seen on the front cover of FRF 7, and on page 4 of the same issue, the R. Condor QSL card is shown.

Regarding the worst stations, here are some reasons people gave for voting for them;

R.Verona; Bad quality transmissions & poor programmes; R.Black Shadow; For the frequency modulated signal on SW causing wide interference.:

R.Atlantis; For not giving an ID or any announcements; REI; This was a surprise but the voter doesn't like the soul music they played!

(More comment in FRW mag' on the Best Station & Best Prog' sections, see p.3 for info' on how to get FRW magazine!) Meanwhile FRF would like to extend their congratulations to all who did well in the poll & we'd like to say thanks to all who voted & if you didn't vote WHY NOT?!!

Special notice! F.R.C.Ireland will be changing their address in mid-July, more details when it is known. The name of the publication will also be changed to, "Sounds Alternative." *********



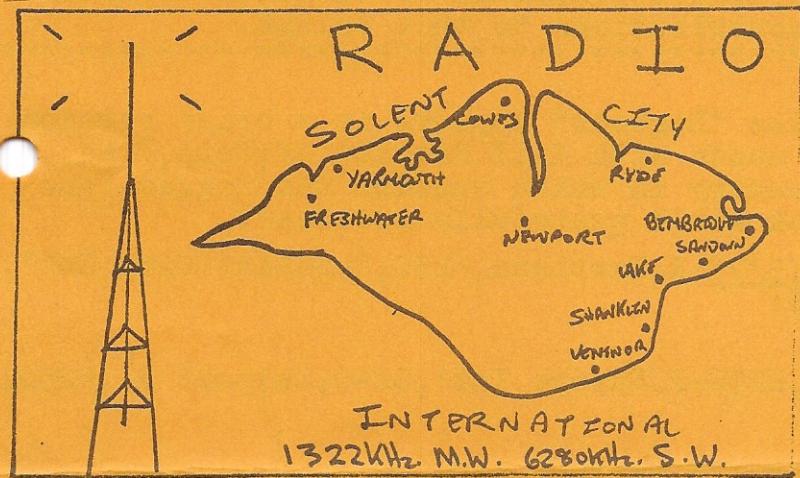
Left: R.Ch.292 (2nd)

Below: R.Ali Baba (9th)

Ontvangst- en Zend-
Station



Below: R.Solent City Int' (4th)



240
mtr.

180
mtr.



POSTBUS 278 – ZUTPHEN
INTERNATIONAAL

Below: R.Hawaii (6th)

Skyport Radio  QSL
are pleased to verify your report

Date 19/9/76.

Time 1006 Z.

Freq. 6055 KHz. Power 15 W.

134 Eastworth Rd

Chertsey

Surrey

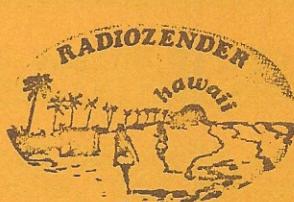
England

Technician



RADIO HAWAII
QSL

P.O.BOX 25
EMMERCOMPASCUUM
NETHERLANDS



DATE

FREQ

TIME

TO

GMT

SINPO

DUTCH ~ PIRATSTATION

Above: Skyport
Radio (5th)



Left: R.Verona (Joint 6th)

Q·S·L.

No QSL of the month this month as you've a page of them on the reverse!

<u>Station.</u>	<u>Contents.</u>	<u>Days for reply.</u>	<u>Rating.</u> (Out of 5!)
*R.Europe Int'	QSL,C,L,I.	7	***1
European M.R.	QSL,Photo.	13	***?
R.Gloria Int'	QSL,L.	69	***
Kent North R.	QSL,L.	14	**
R.Partisan.	L,S.	17	*
R.Solent City.	QSL,I,S.	14	**
R.Sunshine.(GB)	QSL,L,S.	18	***
Tower R.(FRG)	Sh,L.	7	*
R.239(London).	C,L.	14	**

Key; QSL=Proper QSL card.;
C=Publicity card or post-
card.; L=Personal reply.;
I=Information sheet; S=
Sticker(s).; Sh=Photocopied
QSL sheet/QSL letter.;
*=now ABC Germany!
#=Sent 9 b/w 35mm photo's
showing DJs, studio, tx, mod-
ulator & 15w tx!(5 star!!)

Stations from which no reply has been received after 6 months!

R.Free Atlantis(FBU); R.In-Sounds; R.Snoopy; R.Klein Fritzchen; R.Atlantis:
For deadline date see p.10, for contributions to this column.

LOGBOOK.

Due to the popularity poll results "Logbook" appears in a brief version this month, but will return next month with full details of; Date, Freq., Time(GMT), SINFO, Programming & country in which station was logged. Your contributions for FRF15's logbook would gratefully received!

Omissions from FRF13s logbook; 1/5/77; R.Partisan, 6250; R.Solent City Int', 6280; R.Corsair, 6220; R.Omega, 6275:

FRF14s Log;

8/5/77.; R.Valleri, 6203; Tower R., 6250; R.Europe Int', 6240; Skyport R., 6250;
R.Maniac, 6240;

14/5/77.; R.Smokey, 1331;

15/5/77.; R.Omega, 6275; Tower R., 6265; R.Valleri, 6203; Skyport R., 6250.;
R.Ch.292, 6220; European Music R., 6265; R.Benelux, 6240; R.Atlantis, 6235;

22/5/77.; RNI(LB), 6256; R.Partisan, 6250; R.Atlantis, 6220; Tower R., 6265;
R.Valleri, 6203; European Music R., 6265; Skyport R., 6250; R.Zodiac Int',
6275; Caroline Zender, 6235;

29/5/77.; RNI(LB), 6256; R.Solent City Int', 6280; R.Sunshine, 6235; R.Valleri,
6203; Freaks R., 6220; R.Atlantis, 6220; R.Maniac, 6240; Skyport R., 6250; R.
Tower, 6250;

5/6/77.; Tower R., 6250; R.Solent City Int', 6280; R.Corsair, 6220; R.Dynamite,
6237; R.Sunshine, 6235; RNI(LB), 6256; R.Verona, 6202a; Skyport R., 6260; ABC
England, 6220;

12/6/77.; R.Sunshine, 6235; ABC Germany, 6240; R.Tower, 6220; R.Valleri, 6203;
R.Maniac, 6240; Caroline Int', 6220; R.Verona, 6270a; Skyport R., 6260;

19/6/77.; R.Valleri, 6203; Britain R.Int', 6220; R.Gemini, 6238; R.Sunshine,
6235; R.Corsair, 6215a & 6250; European Music R., 6265; R.Verona, 6270a;
Skyport R., 6260;

Identified from FRF13! 13b) Best to keep quiet about these stations otherwise M.I.5. might get agitated!!(Mike Burden.)

13d) Could have been R.Dynamite?(Mike Burden.)

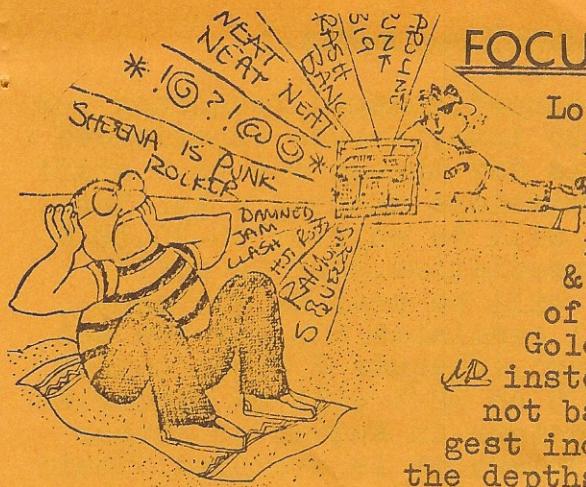
Unidentified. 14a) 1/5/77, 6238kHz, 08.56+, Eng' speech, Eagles records,
overmodulated! 14b) 29/5/77, 6235-40kHz, 09.04-09.23(s/off). Top 20 mx.,
no announcements. 14c) 28/5/77, 1331kHz approx., 22.50GMT, Poor signal,
playing Beatle Live at Hollywood Bowl LP!

Correction! No.67) in FRF13s logbook should read, 'London Music R.' & not
(R.Alamo Int', !!)

Addresses will be back with next months log'. Contribution deadline to
FRF15s logbook, see page 10!

AIR MAG' no.2 available for 40p+sae from; FRC-Scotland, NBPS, 52, St. Enoch
Sq., Glasgow, G1 4AA, Scotland.. In no.2; Irish radio, R.Caroline N., etc...
No.3 out soon!(Price for continental readers; -5IRCs.)

FOCUS FEEDBACK



Lots of topics this month, including more letters replying to Steve Joen's letter in FRF12. But first an interesting one on Caroline.....

.."I'm sorry to say that Radio Caroline has now jumped on the puerile Punk Rock band wagon & is currently playing/promoting(payola?)records of the so-called 'New Wave' bands.Oh for the Golden Days of the sixties when RC set the trend instead of following it!As if the news of RC is not bad enough, the morning of 14/6 brought the biggest indication so far that the station has 'plunged the depths to Rock Bottom', with DJ James Ross asking for money for a new 50kw tx.This has been repeated often

with the announcement that Caroline is your station,she belongs to you!It occurs to me to me that the answers to these two questions might prove interesting...i)Knowing as she did that 10kw would be insufficient on 953kHz,why did they not stay on the clearer 1187 until 1978 when she would have had to move anyway due to the introduction of the new MW Freq' Allocation Plan..ii)Why is Caroline suddenly our station again for the first time since the 60s,when throughout the '70s she's shown gross contempt for us her listeners?It seems that she's arrived back in the real world & realises that 'Man doth not live by L.A. alone.' I think we should think twice before sending money to Spain or displaying RC car stickers.Both these are illegal,so why support a radio station that does not promote the fight for free radio & calls all FR supporters *...WANKERS!!!!Are you a wanker????....The theory of opening a new band on Sunday morning is a good one, but there is the danger of preaching to the converted,a new band must be on the dial of an ordinary listeners rx & not just on a communications rx.There are also lots of high power stations which could easily swamp a FR station whether it be marine,BC or Ham.An obvious choice does not seem to exist & so we must make the most of a poor job & stick with the present 48mb,unless of course the Home office have a good suggestion?".....Chris Cortez (29) ABC England.

..*Chris here refers to an abusive letter from Samantha to Jim Logsdon which has been reprinted in Beacon mag' & Offshore Echos France no.18...

..Now a letter about CB(Citizen's Band Radio).....

.."I'd like to start stirring the shit regarding CB.Does the name CB suggest that people with licences are not citizens?Contrary to what CB supporters would like to think,radio amateurs are not some sort of super pains who've passed a fiendishly difficult exam.THE R.A.E. is really very simple & can be taken by any citizen-I passed when I was 14.If CB supporters spent as much time studying for the exam as they do campaigning for a CB they would soon be on the air telling everyone how easy it was!Perhaps an FM VHF CB would be a good idea, but I'm opposed to 27MHz which clobbers TV & RC aircraft.If we get CB the Home Office should come down hard on offenders & not turn a blind eye like they do to pirates on VHF amateur bands.Mark Ward.Berks."...Hmmm!OK CBers get writing!.....

.."As for the worst station,my view is that as long as a station conforms to a certain amount of decency & does not interfere with emergency & other radio services,then the op's are free to broadcast what they want,as the whole concept of FR I think is radio free from restrictions & contrary to what Mrs.Whitehouse thinks,there's always the off switch. Andrew Hewkin.Blackpool."...The winners(?)of the worst station section in our poll(Black Shadow & Verona)were bad interferers.....

.."I personally disagree only with the idea of joining a FR organisation & abiding by it's rules,since no two seem to have the same aim,e.g.If we abided by CIBs rules(if it still exists)we'd be silent & likewise if we followed the wishes of Chairman Roy(FRC Lndn.)we'd have to be afloat to be good.However,I think it's an excellent idea to form an organ' similar to the USAs NAB whereby technical standards & censorship standards are set.Julia Page.Kent North R."... Apologies to anyone ommited & to badly edited letter!Write in your views now!

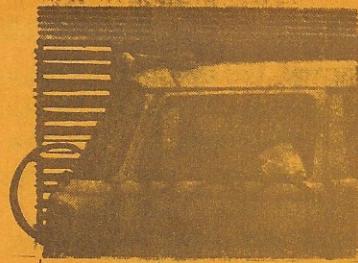
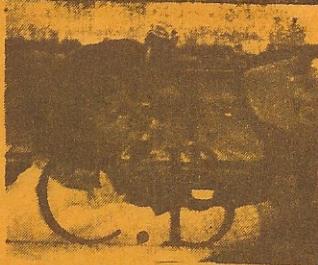
SW Landbased news cont'd... ABC England unannounced, changed frequency for their 5/6 transmission to 6220. This was due to interference experienced on 6270 by a pulse type jammer station. On this day though due to a staff shortage & problems with the equipment, transmissions started a $\frac{1}{2}$ hr late. From 3/7 transmission the DX prog' on ABC E. will be on from 10-10.30 & will not be repeated, this will provide more needletime. News is still welcomed by listeners & a copy of the script will be sent to all contributors. B/W photo's of the studio are still available, 60p for the set of 3(or 6IRCs) to; 42, Arran Close, Cambridge, Eng'. (Cheques & Giros cannot be accepted.). R.Zodiac Int' who were on 6275 on 22/5 will be making a test in July before starting regular transmissions in August on either the 3rd or 4th Sunday of each month on 6225(unless it is occupied.) Their address;c/o FORP/FRF..... Monthly Schedule; Some sort of schedule has been formed with the announcement by the following stations of a regular monthly transmission; 1st Sun:ABC England, 6270.. R.Solent City, 6280:: 2nd Sun:.. R.Maniac, 6240.. Tower R.(No set freq' yet!)::3rd Sunday:European Music R., 6265::4th Sun:No stations as yet!.. FRF urge all irregular broadcasters not to use the above reserved freq's & to check all freq's before going on the air as several stations have been interfering with each other recently, examples;-22/5, EMR & Tower R. both on 6265.. 12/6, R.Maniac & ABC Germany on 6240.. 19/6, Gemini on 6238 & Sunshine on 6235.. 26/6, Time R. & Sunshine on 6235.. & R.Verona who comes up all over the band & drift. This 'Mutual jamming' must stop now!! August 14th broadcasts. Many stations no doubt have plans for transmissions on this special day, and let's hope the minimum amount of interference is incurred. Our North American DX freinds would like to join in on these special transmissions & are requesting stations with 40w+ to do a broadcast to North America on that day, the best time being from 04.00+GMT. For more details stations are requested to contact; Bill Whitacre, 2609 Devonshire, Lansing, Michegan 489-10, USA. He will assure you of good pre-publicity among North American DXers.....

Medium Wave Landbased News; LONDON & SOUTHERN ENG'...On 7/6(Jubilee Day in Britain)on 1331(227m) a new station, Jubilee R. was heard with very proffesional programming. The station came from the Worthing/Brighton area & was on FM simultaneously... Former Cockney Caroline DJ, Chris Elliot is now heard regularly on London Music R 1358(222m)... On 29/5 a new station, Free Hampshire R.

was heard in Southampton at 15.00 on 259m. No address was given..... London's FM soul station, R.Invicta has suspended transmissions due to the introduction on BBC R1 of a regular soul music programme..... DUBLIN.. FORP/FRF member station, Downtown R. (Dublin) have changed their name to, Weekend Music R. on 222m. Tx power is variable(20-60w). Studio equipment; Trio amplifier, cassette deck, twin Trio record decks, tape recorder, Trio jingle machine & headphones + full mixing facilities. Transmissions are on Sundays at 08 & 11.00local time. DJs-Mark Boland, Dave Christian & Steve Jacobs. Address, c/o FORP/FRF. Verification by an attractive pink QSL card... HOLLAND... MW stations heard recently from Holland and with reasonable programmes include; R.Moonlight(PO Box 25, Emmercompascuum, NL) on 1325 at 23.40 on 10/6. Pop music & Eng/Dutch IDs... Black Shadow R. (PO Box 77, Raalte, NL) on 1331 at 00.00 on 11/6. Pops & Eng/Dutch IDs... Teddybear R. (PO Box 77, Raalte, NL) on 1325 at 00.15 on 11/6. Eng' & Dutch music & Dutch IDs... R.Merel(PO Box 25, Emmercompascuum, NL) 1325 at 23.55 on 11/6. Eng & German oldies with Eng/Dutch IDs.... GERMANY.. On Radio Bremen(A legal ARD station) on 8/5/77 between 19.15 & 20.00local time a programme called "Bis dass die Post uns scheidet" (=Until the GPO seperates us!) was broadcast all about free radio. The programme was produced by Armin Mothes & included recordings of R.Valentine, R.Gloria, R. Kaleidoscope, R.390 among others. Congratulations Armin!! LATE NEWS, SEE P.14!! LATE NEWS, SEE P.14!! LATE NEWS, SEE P.14!! LATE NEWS, SEE P.14!! LATE DEADLINE FOR CONTRIBUTIONS TO FRF15; MON. 1st AUGUST. (Details P.14!).

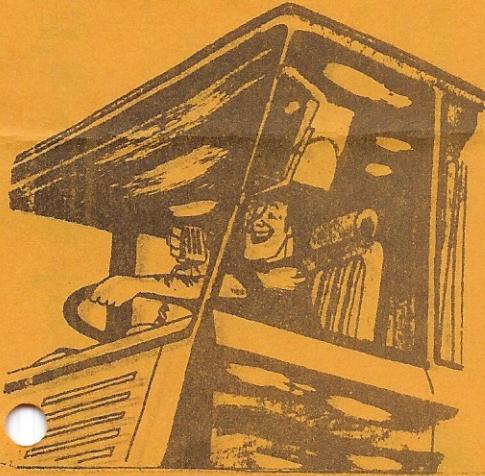
DAILY EXPRESS Wednesday June 8, 1977

OFFICIAL POST OFFICE
Officials were called out to
break down a pirate station.
Radio Jubilee which opened
in Brighton.



The new CB frequencies

In case you've been wondering which frequencies were added for the 17 new channels, here's the entire list. Note that while channels 24 and 25 follow 23 on the transceiver dial, they do not in the frequency allocation. This was to fill a gap between the original channels 22 and 23. All other channels fall in sequence above channel 26.



**CB's own magazine . . .
an illustrated monthly published from Nashville, Tennessee**

CHANNEL	CHANNEL FREQUENCY [MHZ]	CHANNEL	CHANNEL FREQUENCY [MHZ]
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985 "27.995	23	27.255 --
4	27.005	24	27.235
5	27.015	25	27.245
6	27.025	26	27.265 --
7	27.035 "27.045	27	27.275
8	27.055	28	27.285
9	27.065 - Emergency	29	27.295
10	27.075	30	27.305
11	27.085 "27.095	31	27.315
12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135 "27.145	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185 "27.195	39	27.395
20	27.205	40	27.405

" Intermediate channel, not found on American units.

FOR SALE.

"abc's of CITIZENS BAND RADIO"
By Len Buckwalter (USA)
price £1.50. write C/o FRF

CB harmonic frequencies and what they affect

27-MHz CB HARMONICS	SERVICES AFFECTED
2nd (54 MHz)	TV channel 2
3rd (81 MHz)	TV channels 5, 6
4th (108 MHz)	Air-Navigation Band
5th (135 MHz)	Govt. Band Mobile
6th (162 MHz)	Mobile, Police, Fire, etc.
7th (189 MHz)	TV channel 9
8th (216 MHz)	TV channel 13

CB IN BRITAIN ?.

International conventions in 1947 at Atlantic City and in 1959 at Geneva made "Citizens Band" broadcasting possible by allocating the 27 MHz frequency to ISM (industrial, scientific and medical) use. The intention was that this waveband would be reserved for paging systems, remote-controlled models etc., but a proviso permitted its use for speech if interference was tolerated.

The U.S. and several European countries, notably West Germany, license private two-way radio (CB) transmissions on this waveband, but in Britain CB remains illegal, because the Home Office refuses to issue licences for this use - even for a trial period.

The grounds for HoMo objections are that inferior or faulty equipment could interfere with domestic VHF radio and television programmes; they could produce powerful harmonics (see list at foot of page to what frequencies) (fit filters) that affect local sets' reception.

This problem does not seem to apply in the USA,

Public service two way radio in Britain, used by the police, ambulance service and others has its own wavebands, and the Home Office has what it calls a "liberal licensing policy" for commercial uses such as radio and some business firms who use it as an additional communications system. Provided the equipment meets official standards, an annual licence is issued for a fee of £13 a pair of stations. A specific wavelength is allocated.

"Transceivers" for CB can legally be sold and advertised in Britain, but not used. A wide range was on show, however, at a recent hi-fi exhibition in London.

Japan and Hongkong now mass-produce CB sets, and the Home Office is likely to be under increasing pressure to relent, as it is expected that many of these sets will find their way via Europe to the shores of the U.K.

73's-51's from "NOVEMBER"

RX. HE 20 T
Ant. 1/4 GP

JAN-OLOF IWARSSON

Box 2775 Kusby

S-763 00 HALLSTAVIK

SWEDEN

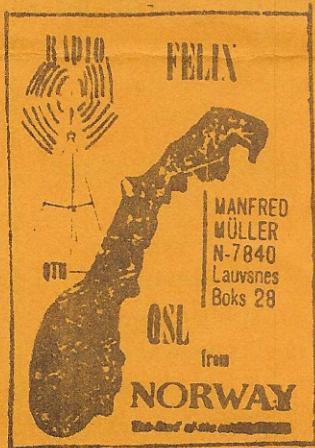
100 % OSL n.r. / 507



CLIPPINGS WANTED!!!

In order for CB GUIDE to keep you abreast of all the latest happenings in the field of two-way radio, we need your help. One of our best sources of information is the newspaper, but there are so many papers across the country it is impossible to read them all. This is where you come in. When you see an item you think would be of interest, clip it out and send it to us so we can share it with CBers everywhere. We will print your name along with the clipping.

If more than one person submits the same clipping, we will print the name of the person who first sent it. Clippings used will be selected by the editors.



... NEJ ALLA LOKALA
STÖRNINGAR BÅKVAR
JAG ELIMINERA
INNAN JAG GÅR
LUFten.....

The most important part of the broadcast equipment (especially where short wave is concerned) is the antenna. This is why many Free Radio stations have good signals on 38metres when only using transmitter powers of 15watts or so.

Dimensions of aerials are always related to the wavelength that are specifically designed to operate at. Therefore it is neccasary to be acquainted with the mathematical relationship of wavelength & frequency:-

$$\text{Wavelength(metres)} \times \text{frequency(kilohertz)} = \text{Velocity of radio waves in free space}, \\ = 300,000 \text{ Kilometres/second.}$$

Therefore the wavelength of say, 6250kHz would be:-

$$\frac{300,000}{6250} = 48.00 \text{ Metres.}$$

Not an uncommon aerial in use these days is the end fed quarter wave antenna. As it's name suggests, the dimension(or length) of the antenna is a quarter of the total of one wavelength of the operating frequency. So from the formula given we can work out the length of that particular antennae.

But before we do, a reminder that we have in fact only calculated the theoretical length of an aerial so far. Radio waves only travel at 300,000 Km/sec. in 'free space' or a vacuum. When travelling through a conductor(such as a piece of wire) the radio waves partially slow down. This effect is known as the 'Velocity factor' & can be given as a percentage for various materials. The velocity factor for copper wire is usually calculated at around 95%.

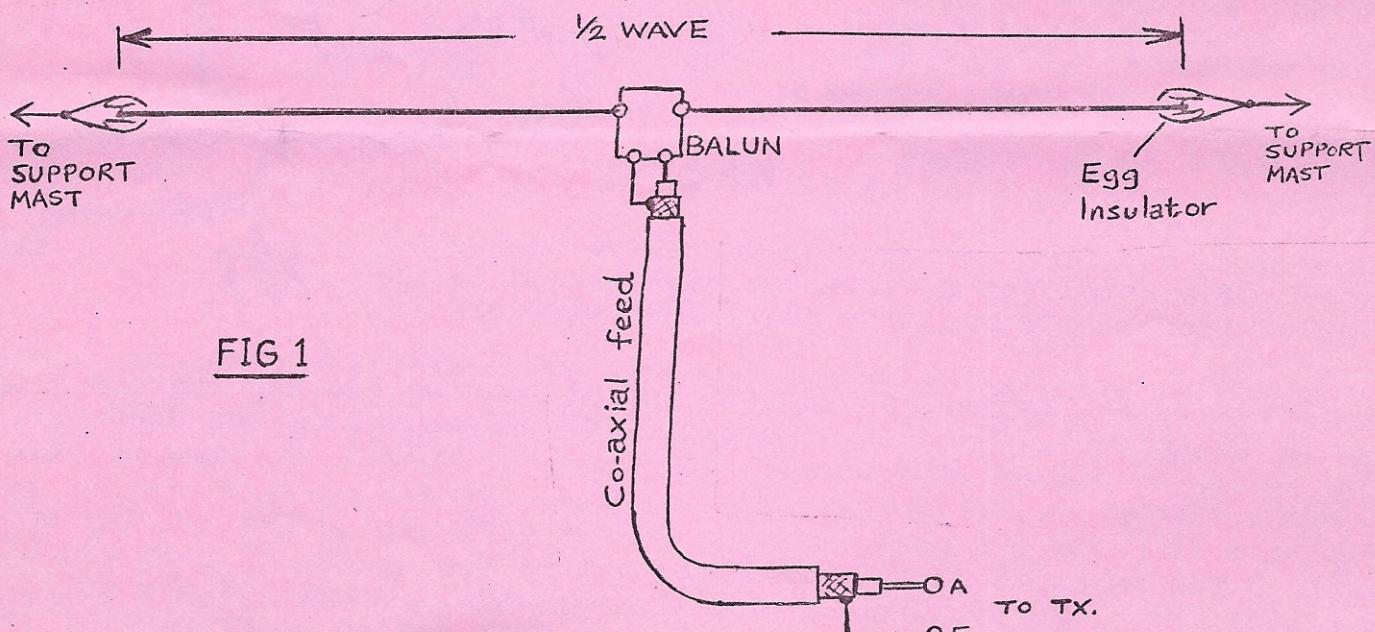
Therefore the practical length for a quarter-wave antenna for 6250kHz (using copper) is as follows:-

$$\frac{300,000}{6250} \times \frac{1}{4} \text{ wave} \times \frac{95}{100} (\text{Velocity factor}) = 11.40 \text{ Metres.}$$

Converting to imperial units;- $11.40 \times 3.3 = 37.62'$ (feet!)
(When & if Britain goes metric, wavelength calculation will be much easier!)

While on the subject of the $\frac{1}{4}$ wave antenna, here are a few words on the physical construction of the device. Care should be taken to check that the aerial wire is well isolated from trees, masts, brickwork & tiles of houses etc.. for maximum efficiency. Egg insulators are very useful for this purpose, and can be obtained from the local Tandy store or any good amateur radio supply shop.

The antennae should also be installed as high off the ground as is
Continued overpage.....



...possible. The antenna can be connected directly to the transmitters output socket, providing it is well earthed, e.g. by a thick lead or cable (as short as possible) running to a copper pipe buried to a depth of 3 feet at least, or by a $\frac{1}{4}$ wavelength of wire running just underneath the surface of the ground. Connection to a water pipe or earth pin on the mains electric supply is most unsatisfactory.

The most popular antenna in use on the 48mb is the $\frac{1}{2}$ wave dipole. As the name 'di-pole' suggests, the aerial has two 'poles' or radiating elements, & is connected to the transmitter at the centre. From our formula we find that the total aerial length is 22.80metres (or 75.24feet).

Connection of the transmitter to the dipole is by co-axial cable (see fig. 1), and a good quality 75ohm TV co-ax is suitable for the job. However some conversion must be made from the unbalanced electrical state of the co-ax to the balanced state of the dipole, otherwise the transmitter power will not be efficiently transferred to the dipole causing stray RF currents around the outer braids of the co-ax. These currents affect the radiation pattern of the antenna, & as well as draining away effective power, can be the cause of TV Interference. The cure is the fitting of a 'balun' transformer (technical abbreviation for, balanced to unbalanced) & can be bought from an amateur supply shop or can be home built. Once again precautions about insulation are taken with the dipole & again it's an advantage to install the antenna as high off the ground as possible.

A simpler version of the dipole is the inverted-vee. It's simpler because it only requires one point of support (at the centre, or apex of the Vee) & it is virtually omni-directional (whereas the dipole is not quite). In theory it produces more ground wave than the dipole (that's if the dipole is mounted in a dead horizontal plane) because of the high vertical component in the antenna. This is something important to think about as the Home Office will find it easier to DF a station on the ground wave signal rather than sky wave. Physical construction of the inverted Vee is almost the same as the dipole (except for the Vee shape), but because the ends of the Vee are nearer to the ground, the radiating elements should be approx' 1 foot (30 cm) shorter (because of the capacity between the aerial & earth). Also the ends should be well isolated from the ground. The angle of the Vee can be anything between 90 & 120 degrees, but never less than 90° as this will cause cancellation of the transmitted signal.

The Balun. Fig. 2 shows the basic layout & circuitry. The ferrite ring (or core) should have an outside diameter

(OD) of $2\frac{1}{2}$ " & ID of $1\frac{1}{2}$ ". It has a trifilar winding (ie. 3 turns) of 10 turns of 16SWG enamelled copper wire, spaced equi-distant over the entire 360° of ring. Extra insulation can be added between windings & core to boost power handling to well over 1000watts. The balun is suitable for any 75ohm system & should operate efficiently between 1.8 & 60MHz. Weather proofing can be supplied by a coating of resin or it can be mounted in a sealed box with joins coated with epoxy cement. If a metal box is used the ring should be insulated from inside walls by paxolin or similar material.

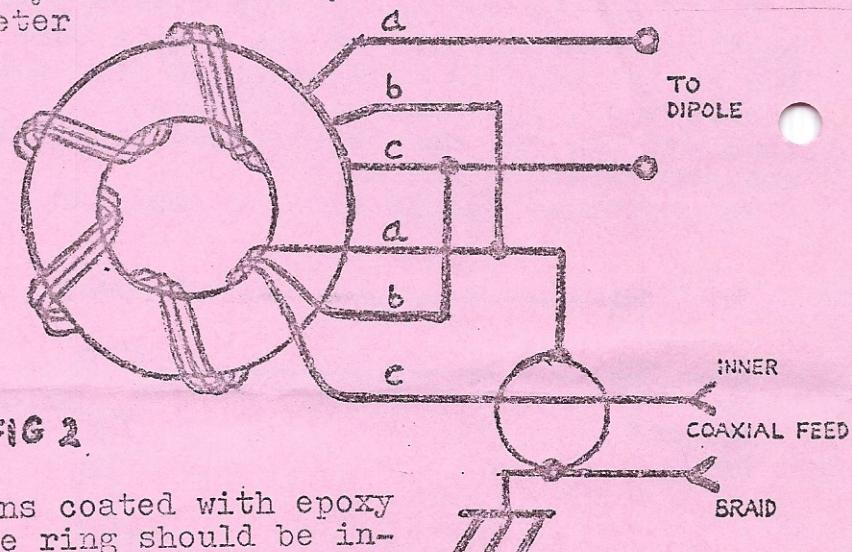


FIG 2

Key rings.. Read, "Radio Caroline, 319 mw", on reverse, "Loving Awareness from the MV Mi-Amigo."..25p each... Caroline 319 badges, nearly 6cm diameter, 40p each.. SAE please with orders less than 90p to; BLP, 10, Pembroke Rd., Mitcham, Surrey.....
Deadline date for all contributions to FRF will now be the 1st day of each month & the magazine should reach readers by the middle of that month.
Deadline FRF 15; 1/8/77... FRF 15 out mid-August (MOA Special! 10yrs on!!)
Sorry no room for late news, thanks to all this months contributors!!!!!!!"